Thirty cases of nephrotomy showed a recurrence in fifty-six per cent.

Thirty-three pyelotomies showed fifty-one per cent, recurrence.

Twelve nephroctomies showed stone formation in the other kidney in one case.

These figures show that we may have an unknown condition in individuals which causes stone formation and also that in the kidneys themselves conditions exist that influence formation.

Cabot thinks that infection of the kidney does not produce any greater liability to recurrence of stone than it does in the primary formation of stone.

This may be true, but it seems to me that the cause of infection, or the means that continues the infection after the stone is removed, is a potent factor. This, as a rule, is due to the lack of proper drainage either in the pelvis or in the kidney proper, from tissue destruction. This would also apply to the length of time the stone had been in the kidney. If a large area of tissue had been destroyed and the cavity drains well, there is less likelihood of stone formation than there would be in a small cavity, which was poorly drained.

The fact that more stones recur in patients under thirty-five than over does not upset this idea of drainage, because the stone-forming tendency is also greater at that time of life.

Diet and medication seem to have little effect in preventing recurrence of renal calculi. Most authors prescribe diets, mineral waters and various drugs, all of which have no specific effect, but are such that tend to aid the digestive and eliminative processes. As this is a matter of years and not a few months, if we are to derive any benefit at all it is well to regulate the habits of the individual in as simple a way as possible, or he will quickly discard your restrictions.

It is well to have the patient keep in as good a condition of health as possible by eating a plain mixed diet, avoiding alcoholics or too much tea or coffee, taking regular exercise and drinking plenty of water

At the time of operation for renal calculi, we should ascertain, if possible, in case of pelvic stone, if any condition exists that prevents the pelvis from emptying freely. This may be due to ureteral kinking from a movable kidney; a constriction of the ureter or pressure from an aberrant vessel.

In the kidney the cavities, left after the removal of calculi, should be opened widely into the pelvis so that the urine readily drains from them.

After operations I have, in a few cases, lavaged the pelvis after the patients had recovered from their operation. This certainly hastens the clearing of the urine where there has been infection, but whether it has any effect in preventing stone recurrence, I cannot state.

It is a question at times whether we should again operate on some of these patients.

I have recently seen a man over fifty who had four years ago several calculi removed from one kidney. These had caused considerable destruction of the parenchyma. He had, and has, a high blood pressure and is not a good subject for surgery, being months in recovering from the effects of his

operation. At present he has again several calculi in the kidney, but the function of this organ is almost as good as its fellow and the man is feeling well. I have advised him to be under observation, but unless impelling symptoms appear, not to be operated upon.

We should after an operation for renal calculi, impress upon our patients the possibility of stones recurring and the necessity of his keeping under observation. X-ray examinations should be made from time to time and the occasional examination of the urine and the lack of symptoms should not be relied upon.

We should, in operating, try to do so in such a way that we do not leave a large amount of scar tissue. Keep in mind the possibility of a second operation.

The use of rubber drainage tubes, or prolonged drainage with much scar tissue resulting, is a thing that can be avoided by seeing that the urine can drain freely into the bladder and after treatment through the ureteral catheter if necessary.

I recently removed a kidney from which a calculus was taken two years ago. The wound was drained by means of tubes and a sinus persisted after their removal, due to a constriction in the ureter that was not recognized. In order to get the kidney out, I had to dissect it from a large mass of scar tissue which was everywhere adherent and must interfere with surrounding organs.

What I have tried to convey, in this short paper, is the necessity for a better study of cases of nephrolithiasis before, during and after operation.

Book Reviews

Surgical Clinics of Chicago. October, 1918. Vol. 2, No. 5. Published bi-monthly by W. B. Saunders Co., Philadelphia. Price, per year, \$10. Contents—A. D. Bevan: Congenital wry neck. Desmoid tumor of abdominal wall. Epithelioma of leg. Ulcer of stomach on lesser curvature. Abscess of lung. D. N. Eisendrath: Clinical lecture on the acute abdomen. C. L. Mix: Gastric carcinoma. E. A. Printy: Demonstration of perfected technic for posterior gastro-enterostomy and for cholecystotomy. E. L. Moorhead: Exstrophy of bladder. C. M. McKenna: Clinic on genito-urinary surgery; papilloma of bladder; kidney stone; ureteral stone; acute epididymitis. T. J. Watkins: Presentation of cases treated by radium for hemorrhages due to benign causes. C. B. Reed: Obstetric clinic. C. A. Parker: Neglected club-feet. M. A. Bernstein: Teno-peritendinous transposition, improved technic for tendon transplantation. A. J. Ochsner: Bilateral Gritti-Stokes amputation.

The Human Skeleton. By Herbert Eugene Walter, Associate Professor of Biology, Brown University, with 175 illustrations and 214 pages. The Macmillan Company, New York.

The writer was much interested in reading the above work; it recalled his earlier studies in biology, and really recalled many interesting facts concerning the evolution of the skeleton, both in man and the lower animals. Everything is plainly stated and therefore will be very useful to the

beginner in biology. The book can be recommended to both students in elementary biology and laymen. F. E. B.

Manual of Vital Function Testing Methods and Their Interpretation. By Wilfred M. Barton, M. D. Second revised and enlarged edition. Boston: Richard G. Badger. 1917. Price \$1.50.

In this valuable little compilation the author aims to present the more recent functional methods for studying the more important organs—the liver, kidneys, heart, pancreas and ductless glands. The wide interest which clinicians are now taking in the study of the functional pathology of disease, as opposed to the control of clinical work by the method of pathological anatomy, gives such a work as this more than a timely interest. The author has attempted to describe most of the important tests presented in modern medical literature, but it is fair to say that not all of the numerous functional tests described in medical periodicals and summarized in this book have proven of real value. Indeed, only a few have stood the test of time. The value of the work would have been materially enhanced had the author better sifted his material and, of the numerous methods described, laid stress upon those alone which have proved of real value in clinical diagnosis.

S. H. H.

Clinical Diagnosis. A Manual of Laboratory Methods. By James Campbell Todd, M. D., Professor of Pathology, University of Colorado. Fourth edition, revised and reset. 12 mo. of 687 pages with 232 text illustrations and 12 colored plates. Philadelphia and London: W. B. Saunders Company. 1918. Cloth, \$3.00 net.

Todd's laboratory manual, now in its fourth revision, is a book especially intended for students' and physicians' laboratory use, and to this end meets all requirements. It is not a comprehensive laboratory text-book. The author has selected usually the best and simplest methods and these are presented in sufficient detail to be made use of by those who have not 'had any considerable degree of laboratory training. Refinements of older tests are frequently noted and certain newer tests, such as the concentration method for malarial parasite, urobilin determination and the mastic spinal fluid test are included. The introductory chapter on the use of the microscope is to be especially commended. The physician who interests himself in laboratory procedures will find this little volume of considerable assistance.

E. A. V.

Dispensaries: Their Management and Development. By Michael M. Davis, Jr., and Andrew R. Warner. New York: Macmillan Company.

This book is a notable contribution to the modern literature of medicine and sociology. The subject is treated with thoroughness and broadness, and in a style which makes it accessible not only to the medically-trained man but to every person who seeks information in the far-reaching changes which are taking place at present in the medical profession the world over. The "Dispensary" is discussed in this book since its early incipiency in England until its latest and fullest development in this country. Nothing is lacking in this volume: The aim and purpose of the dispensary is discussed; admirable building plans skilfully presented; detailed suggestions in regard to the organization and conduct of the clinic elaborately dealt with, and the establishment and maintenance of a social-service department in conjunction with the clinic fully explained. It is a book worth while reading in these days of social reconstruction.

A. G.

Medical Clinics of Chicago. Volume 2, Number 1 (July, 1918). Octavo of 311 pages, 57 illustrations. Philadelphia and London: W. B. Saun-

ders Company, 1918. Published bi-monthly. Price per year: Paper, \$10.00; Cloth, \$14.00. Contents.—Frank S. Meara: Hyperpiesia of Clifford Allbutt. William H. Park: Practical immunization against diphtheria. Frederick Tilney: Wilson's disease. W. L. Niles: Subacute non-tubercular pulmonary infection. C. B. Slade: Relation of pulmonary tuberculosis to general practice. E. Libman: Clinical features of subacute streptococcus endocarditis in the bacterial stage. Thos. F. Reilly: Minor and misleading early symptoms of disease of heart and circulation. R. G. Snyder: Discussion of three unusual cases of aneurysm of thoracic aorta. W. J. Heimann: Relation of internal disturbances to dermatologic conditions. M. H. Bass: Cutaneous manifestations of acute rheumatic fever in childhood. O. M. Schloss: Acetone body acidosis in children. J. B. Neal: Epidemic meningitis. B. B. Crohn: Clinical conditions characterized by obstructive jaundice. S. P. Goodhart: Primary myopathies and their endocrine relationship. R. Ottenberg: Survey of hemorrhagic diseases with especial reference to blood findings.

Mammalian Dentition. By T. Wingate Todd. 290 p. 100 illustrations. St. Louis: Mosby. 1918.

Price, \$3.00.

The author covers the salient features of mammalian odontologic evolution in a remarkably concise and pleasingly lucid style. He refers to his book, in the preface, as "a simple introduction to the study of teeth," but the volume is by no means an elementary one. The student should means an elementary one. The student should have a knowledge of palaeontology and vertebrate anatomy in order to read the work understandingly. Professor Todd displays a wide knowledge of his subject; in fact, his capacity for concise expression indicates extensive research and comprehensive understanding. The arrangement of the book is very satisfactory. A general introduction is followed by a consideration of mammalian genesis. The early study of the marsupialia as presenting adaptations to variations in dietary habits within a single order, is a great help to the evolutionary concept. The investigation of the state of the st evolutionary concept. The insectivores and primates are next considered; especially as leading up to Homo, in whom, naturally, our interest centers. The other orders such as carnivore, ungulate, etc., follow. Considerable attention is given the deciduous dentition, which is an important feature, as the milk teeth are undoubtedly of great evolutionary significance. Professor Todd has presented interesting material for thought in his resembled and the proposed and t marks concerning the premolar analogy theory, and the specialization of the African, etc. I regret that the pressure of other duties has not permitted me the opportunity to give this work the close study and consideration that it merits, but I have added the volume to my library and look forward to the time when I can become more closely acquainted with it. It is well written, copiously illustrated, with excellent photographs and of an interesting style. It will be of particular interest to dentists. F. V. S.

Correspondence

PHYSICIANS IN INDUSTRIAL PRACTICE.

Harrisburg, Pa., Dec. 23, 1918.

To the Editor:—Will you kindly call attention in the next issue of your journal to the fact that Dr. Francis D. Patterson, Chief, Division of Industrial Hygiene and Engineering, Department of Labor and Industry, Harrisburg, Pa., is desirous of obtaining a complete list of all physicians engaged in the practice of industrial medicine?

It has been the practice of this department to hold semi-annual conferences of industrial physicians and surgeons for several years. These con-